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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,701	06/27/2003	Mark V. Vandewalle	5490-000283	9681

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EXAMINER
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ARAJ, MICHAEL J

ART UNIT	PAPER NUMBER
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3733

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/608,701

Applicant(s)

VANDEWALLE, MARK V.

Examiner

Michael J. Araj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-11,13-15 and 17-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-33 and 39-41 is/are allowed.
- 6) ☒ Claim(s) 1,3-11,13-15,17,18 and 34-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of Claims***

Claims 1,3-11,13-15,17-30 and 31-41 are pending.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

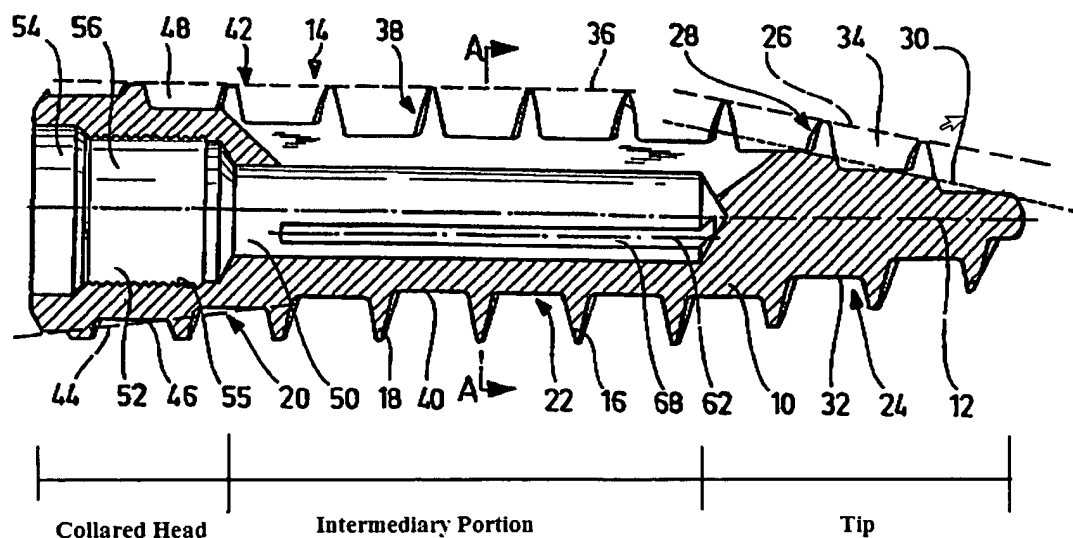
Claims 1,3-11,13-15, 17, 18 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultheiss et al. (U.S. Patent No. 6,755,835) in view of Wolf (U.S. Patent No. 6,629,977).

Schultheiss et al. discloses a bone screw anchor (10) that is operable to secure an implant to a bone that has and externally threaded (14) intermediary portion; a pointed self-tapping tip, comprising of a cutting flute that extends across a part of the intermediary portion, located at a first end of said intermediary portion; a collared head, comprising of a cutting flute, located at a second end opposite of said tip that has an interface capable with a driving tool; and a threaded interior (55) bore (50) extending through said head and through said intermediary portion, where it is operable with threads of the fastening device (a screw) to secure the implant to the bone (see Fig. 1 below). Schultheiss et al. also discloses a port (62) on the sides of the anchor that can communicate with the interior bore (50) that is at least partially filled with bone cement, an intermediary portion that is completely threaded that has a larger diameter than the

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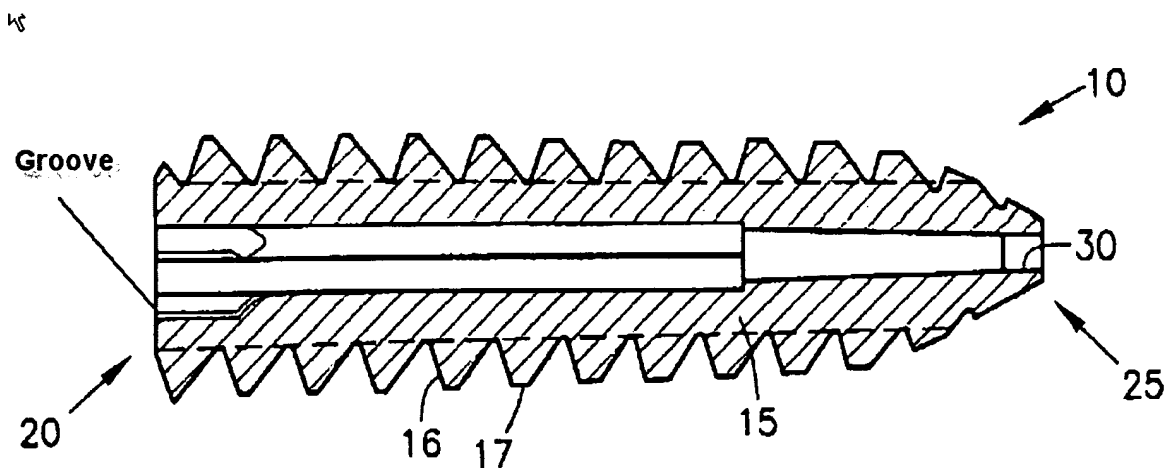
tip and an interface of said head that has at least one recess (54) operable to mate with said driver.

Schultheiss et al. discloses the method steps of securing an implant to a bone which includes implanting a bone screw anchor within the bone using a driving tool operable with the head of the anchor; injecting bone cement into a threaded bore extending through the head to at least a portion of the intermediary portion using a cement delivery device that allows the anchor to be secured; and securing the implant to the anchor using a threaded fastening device secure within the bore. Schultheiss et al. also discloses that the internally threaded portion is inherently protected during the ejecting step, the delivery device is connected to the internal thread of the anchor to protect the threads from being contaminated with bone cement during the injecting step and the bone cement exits at least one port located on the side of the anchor.



**Figure 1**

Schultheiss discloses the claimed invention except for an open tip or a screw head having grooves. Wolf discloses a groove to receive a driving tool to optimize torque capacity when inserting the device. Wolf also discloses an open tip (30) so that a guide pin may be used during delivery and installation. It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Schultheiss with a head defining a groove as well as an open tip in view of Wolf, in order to have a device that can be installed with ease and accuracy.



**Figure 2**

**Response to Arguments**

Applicant's arguments with respect to claims 1,3-11,13-15, 17, 18 and 34-38 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, filed with respect to 19-30,31-33 and 39-41 have been fully considered and are persuasive. The rejection has been withdrawn.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for art cited of interest.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Araj whose telephone number is 571-272-5963. The examiner can normally be reached on M-F 8am-5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MJA



**EDUARDO C. ROBERT**  
**SUPERVISORY PATENT EXAMINER**